

## ABSTRACT

The present invention specially deals with a transmission system in which at least two coded optical signals are multiplexed and transmitted between an emitter and a receiver, a first of said coded signals providing a first spectrum having a first carrier wavelength and two side-bands, a second of said coded signals providing a second spectrum having a second carrier wavelength higher than said first carrier wavelength and two side-bands. This transmission system comprises at least one optical filter with to combined filters for the carrier wavelength and the respective sideband.